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ABSTRACT

This document is the result of a consulting program that sought to identify ways in which institutions and individuals in the United States could be of greatest assistance to the education system of the new nation of Namibia, with particular attention to higher education. The report outlines the educational legacy of Namibia's colonial history, summarizes the most up-to-date information on the Namibian government's educational plans, projects, and priorities, and finally highlights areas where Namibian and other observers believe that the United States could offer expertise in support of Namibia's educational development. Divided into two parts, the first part discusses Namibian education including formal education in Namibia before independence and access, equality, quality, democracy, and policies and programs for education and training in independent Namibia. This section addresses matters such as language policy, basic education, secondary education, both preservice and inservice teacher training, higher education, the University of Namibia, the Polytechnic, adult and nonformal education, distance education college, and vocational and technical training. Part two suggests areas in which institutions and individuals in the United States can help, including school desegregation, curriculum development, teacher training, higher education, advanced information technologies, and others. Annexes include programs befitting refugees, current statistics on basic education, international assistance, representative current U.S. educational programs in Namibia, and a survey of Namibian Alumni of U.S. institutions. A list of 6 primary and 6 secondary contacts for interested individuals or groups is included. Contains 38 references. (DK)

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FORWARD TOGETHER

The United States' Role in Namibian Education and Training

Walton R. Johnson
with David E. Devlin-Foltz

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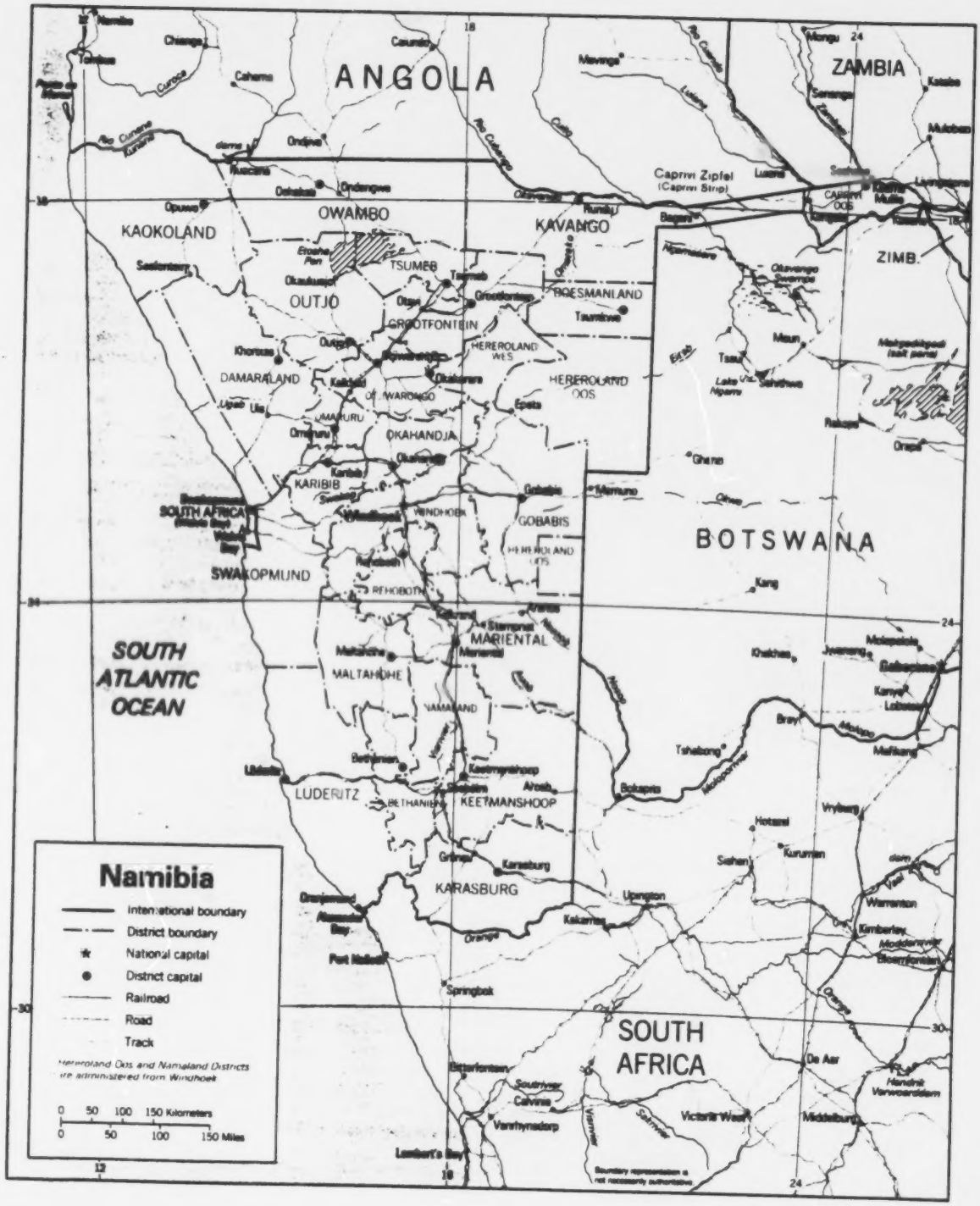

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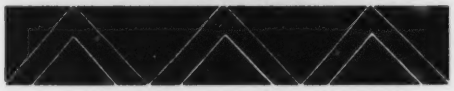

INTRODUCTION

When Namibia became independent on March 21, 1990, the multifaceted and complex tasks of national reconstruction and development lay ahead. The success of these undertakings will depend heavily on the nation's new education system. Education is therefore a central priority of Namibia's first freely elected government. After two years in the educational assessment and planning phases, the new decision-makers in Windhoek are moving to implement an ambitious range of new programs.

But even as these first steps are taken, the long-term planning process is still underway. As this paper is being written, for example, the government is fine-tuning a draft Development Brief for Education, Culture, and Training. Formulating and implementing definitive education plans involves a lengthy consultative process reaching well beyond Windhoek. Government planners recognize that citizens—including parents, owners of enterprises, school teachers, care-givers, principals, and traditional leaders in rural areas—must all understand, formulate, value, and help implement the new educational programs if they are to succeed. In the government's 1990 Education Reform Directive, for example, officials wrote that the document ". . . is not meant to be a sacrosanct edict or preordained decree . . . The educational collective and especially the school community are invited to offer their suggestions for improvement. . . ."

The Namibian government recognizes that it cannot rapidly achieve its goals without external aid. Indeed, assistance from foreign countries is already contributing in many ways. How can scarce donor resources be best focused? What special contributions might Americans make? Under a grant from the Ford Foundation, the Institute of International Education agreed to consult widely in Namibia to identify ways in which institutions and individuals in the United States could be of greatest assistance to Namibian education, with particular attention to higher education.

This document is the result. It outlines the educational legacy of Namibia's colonial history, summarizes the most up-to-date information on the Namibian government's educational plans, projects, and priorities, and finally highlights areas where Namibian and other observers believe that the United States could offer expertise in support of Namibia's educational development.

BACKGROUND

Formerly called South West Africa, Namibia was officially colonized by Germany in 1884, forty years after the first German missionaries settled in the area. Like Germany's other colonies at the close of World War I, it became a League of Nations mandate whose administration was assigned to an allied power—in this case, to Great Britain. Britain, in turn, delegated Namibia's administration to South Africa, a former British colony whose army had fought the Germans in Namibia. Decades of armed resistance to South Africa's occupation, and intense acrimony within the international community over that occupation's illegality, traumatized the country until independence.

Namibia has a land area of 823,000 square kilometers and a population of 1.4 million, of whom 93 percent are African, 5 percent are white, and 2 percent "coloured" or mixed-race. The population growth rate is 3 percent annually.

In the past, Namibia's economy has been an integral part of the South African economy. Most of the profits generated by Namibia have gone to South Africa or to other non-Namibian interests. But the country enjoys a number of important economic assets—including natural resources (base metals, diamonds, uranium, zinc), a viable agricultural sector, off-shore fishing, tourism, low population density, hydroelectric power and natural gas.[1] The country was also fortunate to inherit a relatively modern physical infrastructure. Recent figures indicate that the economy is growing at about 5 percent annually, despite the 1991-92 drought, the worst in thirty years.[2]

Ties to South Africa continue to impede Namibia's development. Pretoria has refused to forgive the $25 million debt created during its administration. Although there is now joint administration of Walvis Bay, South Africa has so far refused to relinquish the tiny enclave, which contains the only deep

water port on Namibia's coast. In addition, South Africa has rejected Windhoek's request to help pay for the many South African government employees still on Namibia's payroll. Namibian officals feel that the rules of the South African Customs Union prevent them from providing incentives for foreign investment vital for job creation and prosperity.

At independence there were about 500,000 economically active people, 184,983 of whom are employed in the formal sector dominated by the country's 70,000 whites. From 20 to 30 percent of the workforce is formally unemployed, but difficulties in assessing participation in the informal sector make unemployment figures somewhat unreliable. Virtually all the jobless, numbering somewhere between 30,000 and 40,000, are Africans. There are between 9,000 and 13,000 new entrants into the labor market each year, but only 2,000 new jobs are created. Unemployment is rapidly increasing. With 33 percent of the population already in urban areas, and substantial rural-to-urban migration, the economy needs more job creation in both the formal and informal sectors of the urban economy.[3]

Mining is Namibia's largest industry, employing about 10,000 workers and accounting for about 34 percent of the GDP and 80 percent of export earnings.[4] The fishing industry, recovering slowly after years of inappropriate practices, is the second largest industry. It could be a great source of wealth.[5] Manufacturing employs only 9,400 people. Mineral processing and livestock and other agricultural means of production have been severely constrained by the country's small, scattered population and by competition from South Africa. Trade, hotels and catering employ 29,400 people.

The largest formal sector employer is the government. The South Africans left an over-staffed, expensive, and largely underqualified bureaucracy. The civil service consists heavily of former South African government employees given job tenure under the terms of the Independence Agreement. Eight hundred of these employees are South African citizens.[6]

Subsistence and small scale farming occupies 70 percent of the Namibian population. In 1988/89, however, agriculture contributed only 8.8 percent of the GDP.[7] The economically active population in the informal agricultural sector is approaching 250,000. By contrast, the relatively well developed commercial sector is composed of only 4,100 white farmers, who employ 33,000 black laborers.[8]

For obvious historical reasons, the distribution of wealth and income in Namibia is greatly skewed. In 1991, the white population enjoyed an average GDP of R41,250 compared to R1,875 for wage-earning Africans, and only R212 for the majority of rural peasants and small traders.

Prospects for Namibia achieving sustainable economic growth are very good. Some project an average annual economic growth rate of 4 percent in 1993-1994 and 5 or 6 percent in 1995. Observers are impressed with the government's pragmatic policies, which aim for a gradual increase in living standards through "balanced growth."[9] They note that "the government has boosted the chances of stability and growth by eschewing unsustainable increases in public expenditure and by making its redistributive economic goals dependent on prior economic growth."

The liberal Foreign Investment Act establishes an appealing climate for foreign investment, guaranteeing security of investments and the freedom to repatriate profits and dividends.[10] A Namibian dollar is to be introduced, allowing the new currency greater flexibility than the South African rand and permitting liberalization of exchange controls.

The sagging mining industry is expected to fully recover by the mid-1990's, once the international economy improves. Hurt by difficulties in marketing uranium, total mining production is still down by about 20 percent. However, diamond production in 1991 showed vast improvement. Moreover, resurgent demand should lead to greater production of zinc, copper, gold, lead, silver, pyrite, salt and fluorspar.

The fishing sector likewise performed well in 1991. The original moratorium on fishing, aimed at assessing resources after severe over-fishing, has been replaced by a quota system rooted in a healthy conservationist policy.

Namibia's tourism has great potential as a foreign exchange earner. Studies predict that in the next 10 years, revenue from tourism could increase nearly five-fold. The country's unique desert and unspoiled environment, coupled with abundant wildlife, are major tourist attractions. Last year, the number of overseas visitors increased 83 percent; the number of South African tourists jumped 118 percent. The tourism industry already employs 10,000 people. One analyst estimates that an additional job is created for every additional 10 tourists who visit Namibia.

Namibia aspires to become an oil and natural gas producer. The government has recently made four drilling agreements with a range of international firms. Experts are optimistic about the possibility of a significant find.

In the end, Namibia's political stability is perhaps its greatest asset for economic development. Recognizing the key role that white Namibians play in the economy because of the privileged position they enjoyed in the past, the government has worked to make them feel secure in their new country. At the same time, it has remained steadfast in its commitment to affirmative action for disadvantaged Namibians.

Many African and "coloured" Namibians are understandably angry about the past. The political pressures for more rapid "Namibianisation" increases. Independence led to high hopes for immediate changes. Many white Namibians are uncertain about the future and resent the democratically elected government. Some desperately cling to vestiges of their former privilege. Nevertheless, on balance, the government's earnest

attempts at national reconciliation moderate potential conflict and have helped produce an atmosphere in which government can pursue productively its national goals.

Namibia places its own development goals in the context of regional cooperation. In August 1992, Windhoek was the site of the signing of a treaty creating the Southern African Development Community (SADC). Emerging from the Southern African Development Coordination Conference (SADCC), the new body recognizes that regional solidarity is a key to future economic growth. Together, the southern African nations—including South Africa, eventually—constitute a resource-rich region of 70 million people. SADC intends to capitalize fully on these human and natural resources.

The SADC countries are embarking on infrastructural projects that will directly benefit Namibia. Only the tarring of several segments remains before the Trans-Kalahari Freeway from Maputo to Walvis Bay will be complete. And only minor sections are left before the Trans-Caprivi freeway, linking Zambia, Zimbabwe, Botswana and Namibia, will be entirely paved. Planners are exploring the possibility of a rail corridor to Walvis Bay as well as links to ports in southern Angola.

In response to these hopeful prospects, international donors, particularly the European Commission, are investing in Namibia. Their interventions are concentrated in the most densely populated, war-torn areas near Angola. Funding focuses on local infrastructure development, agricultural training and resettlement, education, and technical assistance in the fisheries sector. Elsewhere, South African companies, mainly developers and large retailers, are investing heavily in the capital city of Windhoek. Its central business district has been revitalized as new office buildings and shopping malls have created an extremely attractive urban environment.

FORMAL EDUCATION IN NAMIBIA BEFORE INDEPENDENCE

Namibia's present educational needs must be understood in the context of the nation's lengthy experience with apartheid. In 1962, the South African government imposed a system virtually identical to its own "Bantu Education." Schooling for Namibian blacks was characterized by rote learning and a curriculum virtually unrelated to Namibia or practical job qualifications. Even this inferior education system, however, was available to only a few Africans.

By means of the National Education Act of 1980, the Academy for Tertiary Education Act of 1980, and Proclamation AG 8 of 1980, Bantu education was abolished in Namibia. In its place, however, a system based on eleven separate "tribal" authorities was created, retaining the core ideas of apartheid under another guise. Primary education was compulsory for whites but not for Africans. Per capita expenditures for white education were up to five times those for African education.[11]

As a result of this strategy of deliberate inequity, at independence 65 percent of the population could not read or write.[12] Virtually all these non-literates were Africans. Worse still, the new country lacked approximately 3000 primary and secondary school classrooms. Between 30,000 and 40,000 young Namibians had no access to schools. The average African class size was 59 pupils per teacher, while white classrooms had an average of about 10 pupils per teacher. Even today, pupil-teacher ratios average 42 to one in most schools that African pupils attend.

The destructive consequences of the South African system still plague Namibia. In 1991, 3660 pupils took the school leaving examination; 1100 passed, but only 437 scored well enough to qualify for university. Over 2100 pupils failed—nearly two thirds of the total candidates. The average pass rate for schools was only 42.3 percent. This is not an atypical year. In 1990, the pass rate for white schools was 94 percent. The pass rate for schools serving the Ovambo, more than half of the country's population, was about 12 percent. In Namibia's first year as a majority-ruled nation, whites accounted for 75 percent of those qualifying for university entrance while making up only 5 percent of the total population.

Prior to independence, higher education for Africans was almost completely neglected. Throughout the 1970s, only 300 obtained the qualifications for entrance into a university.[13] Moreover, there was no opportunity to pursue higher education inside Namibia until The Academy (consisting of an embryonic university, a technical college, and a College for Out of School Training) was established in 1980.[14] During the 1960s and 1970s, therefore, Africans left the country to pursue secondary as well as university education. By the mid-1980s, about 5000 Namibians had studied abroad (the vast majority of them refugees), largely through the assistance of European governments and international organizations. (Annex I describes the major refugee education efforts.)

EDUCATION AND TRAINING IN INDEPENDENT NAMIBIA: PRIORITIES, PLANS, PROJECTS

Namibia's Ministry of Education and Culture (MEC) will strive for substantial gains in four areas over the next decade as it transforms the young nation's educational system: *access*, *equity*, *quality*, and *democracy*. Each of these philosophical touchstones finds practical expression in different educational sectors. Each has important implications for setting the priorities that should guide international assistance.

Access:

By the year 2000, according to government plans, the majority of Namibians will have acquired basic literacy and numer-

acy skills and a basic understanding of natural phenomena. Providing access to basic education requires enormous increases in the numbers of teachers, schools, and books. Hindrances to formal education in rural areas, and opposition to racial and gender integration at all levels of education, must be overcome.

Equity:

The government recognizes that merely increasing access will not guarantee educational equity. It has promised aggressive affirmative action measures. These include: increased funding for adult and nonformal education; increased opportunities for girls to pursue non-traditional occupational training and courses of study in schools; and national integration across racial, ethnic and economic lines. Of the twenty policy issues identified in the *Education Reform Directive: 1990*—including language policy, assessment and examinations, school fees, and adult and nonformal education—school desegregation and integration headed the list.

Most Namibians want all schools to be open to children regardless of "race, colour, ethnic origin and creed." The government agrees, asserting that parents should be free to enroll their children in any government school and that "normal school procedures of admission will apply." Though each state school is expected to cater to children in its locality, "zoning" of schools to perpetuate racial segregation is prohibited. At the same time, the government has tolerated establishment of private schools, including Afrikaans or German medium schools appealing primarily to a white clientele.

"Affirmative" policies with respect to study and employment in tertiary education will increase the overall representation of the African population in this sector. In addition, however, other historical disadvantages must be overcome. Certain groups of Africans, such as the San, certain parts of the country, such as the North and some remote areas, and African women everywhere are substantially more underrepresented than other segments of the population.

Namibia's goals for educational equity cannot be met by simply establishing a quota system. There are more spaces planned for first year students at the new University of Namibia (UNAM), for example, than there are Namibians who now pass the school leaving exam with high enough grades to enter the university. As a result, policies benefitting Africans, women, and other underrepresented groups will not limit access for qualified candidates drawn from historically overrepresented groups. Affirmative action must consist in large part of devising additional methods of assessing candidates' admissibility, and supporting them once they have enrolled.

Quality:

The government's commitment to provide high quality education starts with increasing and improving opportunities for teacher training. Statistics reveal a frightening deficiency. At independence, 88 percent of Namibia's instructors were either unqualified or underqualified.[15] The government's plans for pre-service and in-service teacher training are the key element in its drive to increase quality. Improved quality will also depend on developing and procuring textbooks appropiate to the new Namibian curriculum, and the introduction wherever practical of new educational technologies.

Democracy:

Namibia's political democratization must, according to the new leaders, be accompanied by a democratic education system. The government envisages broad participation in decision making, at the local as well as upper levels, to assure the new system's maximum responsiveness, effectiveness, and relevance. A government policy document notes:

> In democratic education for a democratic society teachers must be active creators and managers for the learning environment and not its masters or caretakers. We must structure our education system so that the organisations its participants choose to form, for example teachers' and students' unions, can play an active role alongside communities in shaping, guiding, and assessing it. . . . For successful outcomes in democratic education, both learners and citizens must assume responsibility. . . . They must domesticate what is potentially alienating, making it their own.

All elements of society, the government hopes, will feel a part of the process, and, more importantly, will understand how the new education system is accessible and beneficial to them as well as to their children.

Policies and Programs:

Namibia's leaders stress the central role education must play in national development. President Sam Nujoma, while stating that the economy is the government's first priority, emphasized that "education is the second important thrust of the government's policy." The needs are enormous. (Annex II includes current statistics on basic education in Namibia today.) The education budget now absorbs one-fifth of total government expenditure, the largest single slice of the national budget of R2.5 billion.

Assessment of the country's human resource development needs began immediately after independence. Initially, the lack of accurate census and manpower data was an impediment to formulating a national education plan. The previous census (1981) occurred during a period of intense political and military tumult and was therefore outdated and unreliable. The first post-independence census occurred in September

1991. Its results are now being used in the planning process. Specific studies and surveys on various facets of education and training needs have been conducted and serve as the foundation for planning, policy development, and implementation in MEC.

MEC's 1991 annual report documented progress made to date. Most significantly, the report stated, the ministry combined the previous eleven ethnic departments into a unified system of educational administration, management and control. MEC established the Directorate of Educational Planning (DEP) and the National Institute of Education Development (NIED) to provide continuing development and assessment of education in Namibia.

DEP will oversee strategic planning, policy analysis, statistics and data, project preparation, donor coordination, and the development of physical facilities and related services. NIED will concern itself with the content of education, investing its energies in the development of curricula and syllabi; language research; teacher education; education media; and educational assessment, examination and evaluation procedures. It will also train advisors, inspectors, principals and teacher trainers. NIED's Directorate for Teacher Education supervises the Teacher Education Colleges.

In partnership with the Academy for Educational Development and Florida State University, MEC established the Education Management Information System (EMIS) to coordinate activities related to gathering, storing, analyzing, and presenting information on education. EMIS has assisted the Commission on Higher Education, the UNESCO in-service training report, nation-wide basic education reform, and the development of internal databases for MEC projects.

Progress has also been made in establishing working relationships among headmasters, regional education officials, regional commissioners and officers from the Ministry of Works, Transport and Communication. All these disparate branches of government are working together to create an infrastructure designed for cost and resource-effective training programs.

Difficulties, inherited in part from the apartheid regime, have of course hindered education reform since independence. MEC cites poor communication among education bodies (including schools, the regional education offices, and government offices) resulting in widespread rumors and confusion. These obstacles also include the inability of some communities "to mobilize to play their role in the schooling process of their children," opposition to integration among some whites, teacher underqualification and lack of accountability, poor discipline, and inadequate text books, classroom equipment and facilities (especially in rural areas). Finally, planners lament that they have "a political vision and framework for action that are not yet broadly shared."

Despite these obstacles, the government has launched a remarkable range of initiatives in the following sectors:

- Language policy
- Basic education reform
- Implementation of the new junior and senior secondary programs
- Teacher pre-service and in-service training
- Development and establishment of the University of Namibia and the Windhoek Polytechnic
- Development of adult and nonformal education programs, including a national literacy program
- Revamping of vocational and technical training programs

The following sections explore the current status of each of these initiatives.

LANGUAGE POLICY

English is now the official language of Namibia. Until independence, however, Afrikaans was the medium of instruction in most schools. In accordance with MEC's "Language Policy 1992-1996," English has been introduced as the medium of instruction in upper primary schools, secondary schools, and higher education.

For historical, political, and practical reasons, language policy has been a major issue in the design of Namibia's new education system. In establishing English as the medium of instruction, the government stated: "For us, English is a language of international connections, not foreign cultural domination." The continued use of Afrikaans, on the other hand, would only perpetuate "an instrument of isolation and a brake on the ambitions of black Namibians."

And yet, 80 percent of teachers teach in Afrikaans. Pupils speak various of the languages indigenous to Namibia. In many areas, English is virtually non-existent. Many teachers complain that the switch to English was "too fast and final, leaving most stranded with a mixture of poor English, incomplete Afrikaans and a dependence on their mother tongue." The absence of teachers to teach English thus represents a major need.

At the same time, the government hopes to preserve local languages and affirm cultural identities through the use of maternal languages as the medium of instruction in lower primary schools (Grades 1-3). Private schools are permitted to employ any language throughout the primary cycle. Local languages may be taught as a subject, and schools are encouraged to organize extra-curricular language activities.

In June 1992 a national conference examined implementation

of the new language policy. The Prime Minister emphasized that English can serve as a tool to strengthen Namibia's ties to the other independent nations of southern Africa. "There is nothing to stop us evolving our own regional form of English," he said. "We don't want to be little Englishmen, we just want to speak English well."

BASIC EDUCATION

More than 70 percent of children in formal education in Namibia are at the primary level. The constitution of Namibia guarantees free primary education and compulsory schooling until completion of primary school or age 16. Eventually, formal structures will provide 10 years of basic education for every Namibian child: the first seven years (Grades 1-7) in primary schools, and the last three years (Grades 8-10) in Junior Secondary schools.

The program for basic education aims to provide functional literacy in English and another language of Namibia; to foster functional numeracy; and to promote critical thinking and problem solving. In addition, the program is designed to help each pupil develop as an individual and understand the concept of self-fulfillment; appreciate health practices and physical development; and value spiritual and ethical topics. Its authors seek as well to ensure equality of opportunity for girls and women; promote national unity and international understanding; be sensitive to vocational needs and issues of economic development; and promote study of the environment.

SECONDARY EDUCATION

Some 25 percent of the school-going population is at secondary level. Their educational and training needs are formidable. A new Junior Secondary Curriculum was introduced throughout the country in 1991 and will be fully implemented in three years. Its principal aims are to unify the formal education experience for Namibians, a concept formerly impossible due to the 11 separate educational authorities, and to establish English as the common medium of instruction. Equally important, 20 percent of weekly class time will be devoted to pre-vocational subjects.[16]

Two years of education (Grades 11-12) in Senior Secondary Schools will prepare pupils for the International General Certificate of Secondary Education (IGCSE) of the Cambridge Examinations Syndicate. Namibia will be the first African nation to employ the IGCSE. At present, the ratio of Grade 10 to Grade 11 pupils is in excess of 3:1. It will be some time, therefore, before the majority of pupils can be expected to pass from Junior to Senior Secondary School.

The new syllabus recently approved by the government reflects the responsibility of preparing students for entering higher education *or* the work force. It aims to "develop democratic attitudes and skills; to develop and instil [sic] a sense of national unity and loyalty to Namibia; to encourage lifelong learning; and to prepare learners to obtain internationally recognised qualifications that will give entrance to tertiary institutions."

The senior secondary curriculum focuses on the fields of study examined for the IGCSE: Agriculture; Commerce; Technology; Domestic Science and Health Education; Natural Sciences and Mathematics; and Humanities. Physical Education, Religious and Moral Education, and Guidance will also be compulsory subjects in all schools, though not tested through the IGCSE.

Teaching methodology for the new curriculum is intended to be learner-centered and will integrate material from different subject areas. Teachers will be expected to encourage each gender equally. The government acknowledges that substantial in-service teacher training will be required to reach these goals.

PRE-SERVICE TEACHER TRAINING

The number and kind of teachers needed in Namibia depends upon a range of factors including changes in the curriculum, changes in pedagogy, salaries and career opportunities, pupil/teacher ratios, and the system of promotion. The Swedish International Development Agency, the United Nations Development Program (UNDP), UNESCO, and UNICEF have been working for several years on pre-service teacher training programs. In 1993, the introduction of the Basic Education Teacher Diploma will provide a uniform three-year pre-service teacher education program for primary and junior secondary teachers. A four-year program would lead to the Senior Secondary Teachers' Certificate. The Technical and Vocational Education Instructor Certificate will prepare teachers for instruction in pre-vocational skills and for vocational and technical institutions.

Analyses of student flow indicate an extremely urgent need for primary school teachers. If the number of students entering secondary school does not increase significantly, however, the number of additional teachers required at this level will be small.

IN-SERVICE TEACHER TRAINING

Effective learning requires teachers who possess not only mastery in subject content and presentation skills, but the ability to respond creatively to new situations. The demands placed upon teachers in independent Namibia make in-service training for the current teacher corps a major priority. A working party on the topic, including representatives of

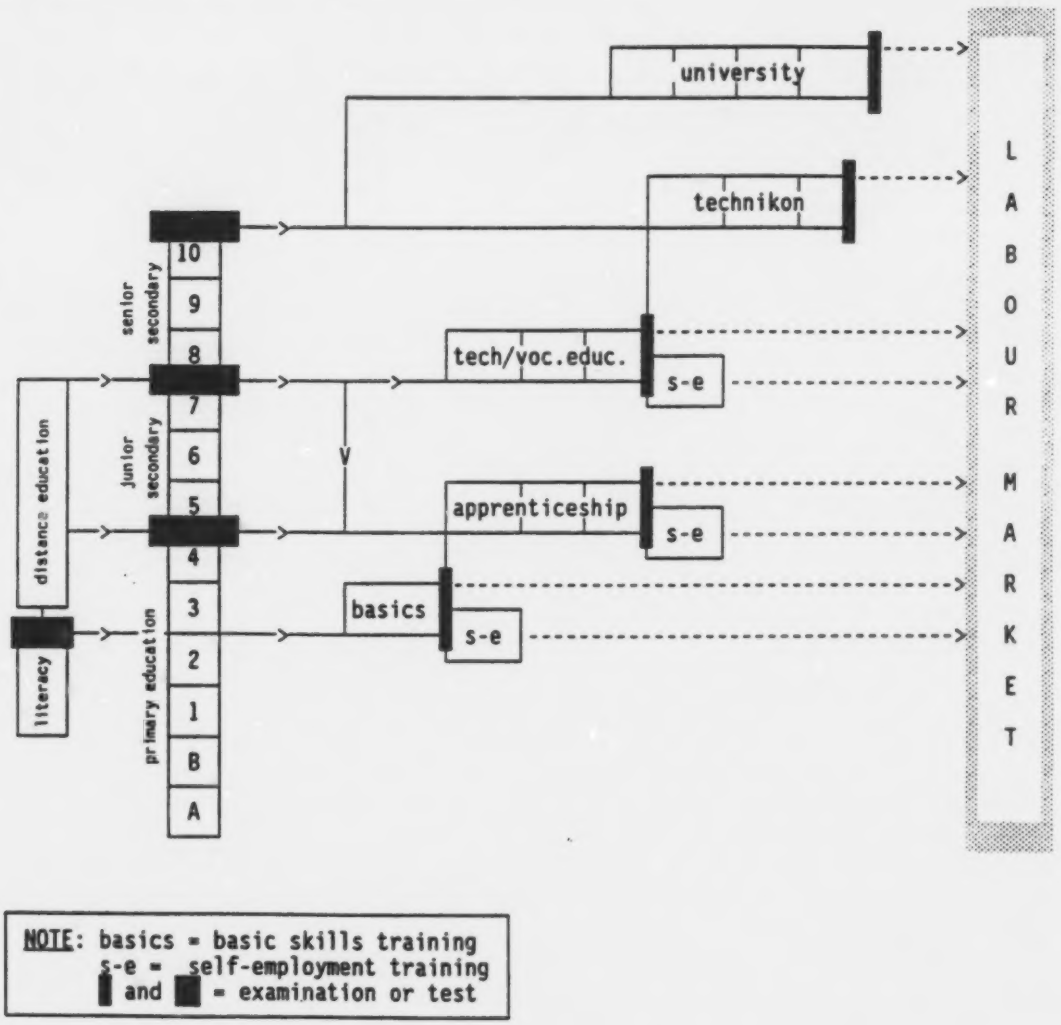

Figure 1 Proposed Education and Training Structure for Namibia

MEC, the teachers' unions, the Council of Churches and the Rossing Foundation, has recommended initiatives to make the transition from the rote-learning techniques of Bantu Education to learner-centered teaching methods. The Project Implementation Unit within MEC will carry out those recommendations.

In one initiative, schools will be divided into regional "clusters," with one school chosen as the site for seminars, workshops, advisory services, and a resource center for reference materials. Teacher trainers and advisors will periodically visit these sites, providing an economical way of reaching the greatest number of teachers.

Other new initiatives focus on curriculum design, administrative consolidation, and the creation of a national accreditation scheme for teachers. The inauguration of the In-Service Training and Assistance for Namibian Teachers project (INSTANT) is an important step in improving teachers' subject mastery in physical sciences and mathematics. In-service training in life sciences and agriculture is supported by IBIS, a Danish donor. In addition to international assistance, MEC will pursue the "development of partnerships with non-governmental organisations, the private sector, and the churches in concerted activities for in-service training."

HIGHER EDUCATION

To assess the country's tertiary education needs, President Nujoma established a special Commission on Higher Education, composed of local and international scholars. The

emerging system built partly on the commission's recommendations will use the same flexible educational "ladder" for all higher education, and allow Namibians to progress steadily from certificate to diploma to degree level studies and to move within the system with relative ease. (See Figure 1 above).

As a result of government's vigorous efforts to implement many of the Commission's recommendations, there are few institutions undergoing greater transformation in Namibia today than those of higher education. The Academy, established by the South African government in 1980, has been dissolved. From its constituent parts, new institutions are emerging.

THE UNIVERSITY OF NAMIBIA

The University of Namibia (UNAM) marked its official opening on August 31, 1992. Its first class of students arrived in early 1993. UNAM will eventually house faculties of Social and Economic Sciences, Law, Arts and Humanities, Education, Natural Sciences, Agriculture and Natural Resources, and Health Sciences.[17] In addition, there will be an Institute of Administration and Management, a Center for Media Studies, a Computer Center, a Language Center, and a Multi-Disciplinary Research Center.[18]

Significantly, parliamentary debate on the university bill affirmed "the autonomy of the University and its commitment to the spirit and letter of free academic enquiry." The bill stresses "the intention of the University of being . . . responsive to the social, economic, cultural, scientific and academic needs of Namibia."[19] Indeed, the university's motto is "Education to Serve Development."

Like other countries with small populations and limited resources, Namibia cannot efficiently develop tertiary institutions to train a handful of skilled people in every field. For the foreseeable future, ". . . faculties of engineering, mining, medicine and veterinary sciences should not be established . . . and special arrangements should be made for the education of students in these disciplines to the degree level."

Other institutions in the region do offer these degrees. Regional and continental cooperation on matters of curriculum, institutional capacity building, and shared training opportunities can lead to significant cost savings for Namibia. All are on UNAM's agenda.

One principal responsibility of UNAM will be to assist in the improvement of the larger education system. The education faculty, for example, will play an active role in secondary school teacher training, shape curriculum, develop educational materials, and refine the national educational philosophy. A research program will help evaluate reforms and suggest improvements.

Apartheid bequeathed the new university an inadequate supply of qualified entrants. A mere 800 Namibians are pursuing undergraduate degrees inside the country. Only 30 percent of this group are African. Fifty percent are "coloured" and 20 percent white. In the short term, therefore, UNAM has decided to broaden its range of admissions criteria. Some students will be admitted based on their academic accomplishments, others by special qualifying examination, while others still may gain admittance through evaluation reports from their schools.

With a view to moving away from the South African 'Matric' system, UNAM will quickly adopt performance on the IGCSE as the chief criterion for conventional "academic" admission. "Bridging" courses will be available for "those not yet fully prepared for the intellectual rigour of university life,"[20] especially in the sciences. UNAM will also offer "access courses . . . for several categories of Namibians." In the long run, expanding the number of students successfully completing the higher secondary level will broaden and deepen the pool of candidates for tertiary training.

Full-time degree programs will be offered in each faculty and department. Part-time degrees and degrees through distance education will also be available. The four-year university program will be divided into Part One and Part Two, each consisting of two years. Following the successful lead of other universities in the region, Part One curricula will be more general. Classes will be larger, making them more cost effective in terms of teachers, laboratories and equipment. Part One results will help identify candidates for the more advanced and specialized courses in Part Two. Part One credentials should offer adequate qualification for entry into foreign institutions in fields such as veterinary studies, medicine, dentistry and engineering, for which advanced programs are unavailable in Namibia.

No student will receive government support at a foreign university if the course of study is available at UNAM,[21] making it less likely that the most able students go abroad. Students in the faculties of Arts, Social Sciences, and Education will be expected to complete the entire degree at UNAM.

University outreach centers and satellite campuses are to be established at an early date in the major population areas of the country. These regional colleges will teach Part One of the university degree. In this manner, more students will be able to attend Part One, reducing the cost of university housing and spreading the impact of the university more widely among the population. One government document judges that "These 'junior colleges' might well prove to be the driving power for educational advance in scattered areas of the country."

Staffing UNAM is a complicated process. Many faculty from the Academy must be integrated into the university despite the fact that many of the personnel appointed by the South African administration are apparently underqualified. Their

tenure is guaranteed, however, and the sensitive task of establishing internationally valid evaluation mechanisms for them has already begun. In the meantime, given the dearth of qualified Namibians, faculty from outside the country are being employed in large numbers to help execute the university's ambitious program.

In addition, UNAM is launching a staff development program by which it can prepare Namibians to assume positions of greater responsibility.

Higher degrees and research are vital components of a well qualified teaching faculty. Initial targets at UNAM aim for a faculty equally divided between academics holding master's and doctoral degrees. But opportunities for graduate training and research are not available in Namibia, and it takes many years to acquire these qualifications.

THE POLYTECHNIC

According to the report of the Commission on Higher Education, "the Polytechnic of Namibia will occupy a position alongside the National University at the head of the national education system. They are institutions whose scope and mode of operation run parallel to one another, but also interlock or overlap." The broad objective of the Polytechnic is to produce competent middle-level human resources for the country's economy. As the economy requires more advanced technical skills, the Polytechnic will eventually award higher qualifications.

The Polytechnic will link with all other major educational institutions. It will cooperate with the College of Distance Education to offer technical subjects all over the country, and maintain close ties and working relationships with UNAM, technical and vocational training institutions, and the public schools. Moreover, there will be "strong cooperation between the Polytechnic and industry at the policy, curriculum, and research levels."

According to the provisions of the University Act of 1992, UNAM is to establish a sub committee of the University Council to oversee the Polytechnic. This subcommittee was established on December 1, 1992, but the two institutions remain independent and separate, reflecting their distinct educational goals. The commission report stated:

> They are both senior institutions of higher learning which inherit the traditions and share the experiences of the world-wide community of institutions to which each belongs. Both admit students who have completed a full secondary education, but the university sets its minimum entrance requirements a little higher up the ladder of examination performance. They are both interested in the advancement and dissemination of knowledge through teaching, especially in being alert to where the frontiers of knowledge lie, and in practising the discipline of rigorous and critical inquiry, but the university gives a high place to formal research, employs full time research staff, and expects its teachers to undertake research and publication as a condition of their employment. Both institutions offer diploma programmes, the university offers degrees, and the polytechnic's diplomas admit its graduates to the second part of the university degree programmes. The university undertakes postgraduate work.

Drafting of the Polytechnic Act will be completed in 1993, after which the Polytechnic will be established by a governing body appointed by the Minister of Education and Culture. It will be administered by a Director with a total of approximately 73 teaching and administrative staff and 500 students.

The 19 pre-vocational options in the Junior Secondary curriculum will be the bases of programs and options at the tertiary level. The Polytechnic will initially offer instruction in:

(a) Technical education and teacher training
(b) Accounting, business and information systems
(c) Graphic arts, printing and design
(d) Library studies
(e) Management and administration
(f) Hotel and Catering
(g) Engineering
(h) Applied science

ADULT AND NONFORMAL EDUCATION

Government initiatives in the field of Adult and Nonformal Education include literacy and numeracy programs, continuing education, adult skills development, and distance education. These efforts, only recently underway, have already yielded significant results. The government reported that "Eighteen adult education centres around the country were reopened in 1991, and four large new centres were opened in the Ondangwa region. Enrollment for Grades 10 through 12 at these centres exceeded 5500."

Faced with a national illiteracy rate of 65 percent, however, the government has placed top priority on the development of a National Literacy and Numeracy Programme designed to reach 65,000 persons yearly from 1994 to the year 2000. A National Literacy Committee was established in 1991, and training programs for District Literacy Facilitators have been developed.

National Literacy Week, held in September 1992, demonstrated the government's seriousness of purpose. Hundreds of district literacy officers and regional trainers from MEC, as well as from nongovernmental organizations, formed literacy groups composed of up to twenty persons willing to learn for six hours a week. The Prime Minister called upon everyone "from Ministers down" to devote an hour each week to teach-

ing someone how to read and write. Even before the week began, all 15,000 places were filled in the 75 national centers in the first round of literacy groups.

The course includes three stages: basic literacy competence; literacy exercises dealing with issues such as health, nation-building, and the constitution; and a basic English course. Learning materials have been prepared in 10 different languages. A fund has been established to finance literacy groups until everyone has an opportunity to participate.

Adult Development Colleges, designed in the tradition of the Folk Development Colleges in Tanzania and adapted to meet Namibia's special circumstances, will be tested in pilot programs. A joint project of the government and the Swedish International Development Agency, the colleges are slated to accommodate 50 students at each school. Training initiatives for adult and nonformal educators are progressing. Following an inter-ministerial agreement, a common certificate course will be established for all extension workers, community activists, adult education organizers, and other educators outside the formal classroom.

DISTANCE EDUCATION COLLEGE

The government's commitment to equal access to education in rural areas will depend in large measure on the success of its distance education efforts. Two programs left from the previous administration, the Distance Education Program for teachers (implemented under the former Department of National Education), and the Technikon's Public Administration and Police Science courses, continue to function successfully.

In the future the principal distance education institution will be the Namibian Distance Education College. To ensure wider accessibility to educational opportunities in every region of the country, the College will make use of specially packaged course materials and study groups. Wherever possible, students will have access to one-on-one interaction with tutors at regional and district resource centers or in local communities. A range of instructional technologies will be utilized to supplement conventional means of delivery. Pilot projects will explore how to make best use of Namibia's relatively well developed telecommunications infrastructure to provide administrative communications, tutorial assistance, and instruction for workshops and seminars. Radio broadcasts, audio cassettes, teleconferencing, video cassettes, and even computer technology could be employed.

The major educational objectives of the College are: in-service training and certification of primary and secondary school teachers; continued training and certification of "development workers" including nurses, community health and nutrition counselors, agriculture extension agents, and organizers of adult and non-formal education programs; English language courses; training of trainers for vocational and technical courses; and provision of "second chance" programs for older students forced to interrupt their education prior to independence. In a March 1992 report, the College projected its student enrollment in 1995 as approximately 20,000.

In cooperation with the Namibian Broadcasting Corporation, MEC is examining potential uses for Interactive Radio Instruction (IRI). "Let's Speak English," intended for teachers, is already on the air. Two accompanying textbooks are available. IRI has been effective in teaching English in primary schools in Lesotho, Zimbabwe, Kenya, Swaziland and Belize. In Bolivia and other countries, radio has provided particularly effective support to primary school mathematics and science education.

Namibians are exploring the possibility of using IRI in support of health programs, teacher training and teacher upgrading, and distance education. Outreach to rural secondary schools and even to the regional centers of the university are likely uses for this versatile medium.

VOCATIONAL AND TECHNICAL TRAINING

The Swedish International Development Agency funded a study of the vocational and technical system. After reviewing this and other studies, the government envisions a national training policy based on a partnership between the public and private sectors. Official plans emphasize pre-vocational training skills in general education, training for entrepreneurship, apprenticeship training for craft production, artisan training, and training in technical applications.

A number of public-private training initiatives have been established. Two examples merit mention. The Namibian Institute of Technology, a gift from Rossing Uranium, was founded to train Namibians in mining-related skills. The government warmly welcomed the initiative, and the institute's mandate is being broadened to meet additional training needs. The Namibian Training Liaison Council aims to help meet the country's business training needs by providing one-year certificate and three-year diploma courses in information technology at the Technikon.

The Technikon and the College for Out of School Training, in revised forms, continue to be major centers for vocational and technical training. Both began as branches of the former Academy. The Technikon offers career-oriented education at both certificate (Grade 10 entry) and diploma (Grade 12 entry) levels in management and administration, commerce, accounting, secretarial skills, and environmental studies and agriculture. Total enrollment in 1992 was 1232, up almost

33% from the previous year. The Technikon will serve as the basis for the Polytechnic.

The College for Out of School Training, with 1992 enrollment of just under 2500, provides training in technical trades and a primary school teaching certificate. Four small technical institutes specializing in wood, metal, construction and automotive trades were inherited from South Africa. The new teacher training institutes will be built on these bases.

Apprenticeship training under the Ministry of Labour and Manpower Development enrolled only 274 people in the most recent year for which statistics are available; the majority of trainees were in mining, mechanical and motor-related fields. The Ministry of Agriculture, Water and Rural Development's water department provides in-service training to approximately 600 people each year at its Von Bach training center. A number of state-owned enterprises also run training programs for their employees.

Finally, nongovernmental organizations are also providing opportunities for technical and vocational training. The Rossing Foundation, for example, offers programs focusing on agricultural development, maritime professions, and English language teaching. The Institute for Management and Leadership Training has courses in business management, agriculture, and offers financial aid and consultancy services to small businesses. The Private Sector Foundation promotes business development with operational and business management training courses, and also provides financial support and consultancy services. The Vocational Training Centre, in Khomasdal, trains approximately 200 young people in motor mechanics, carpentry, building and general subjects including English and mathematics.

The need for vocational and technical education in Namibia far outstrips the capacity of these resources, especially in the fields of agriculture and the health sciences. Government hopes the proposed National Council on Vocational and Technical Training will help define these needs and develop potential solutions.

Part II

HOW INSTITUTIONS AND INDIVIDUALS IN THE UNITED STATES CAN HELP

The government is moving decisively to repair the damage done by apartheid. In one sense, fortunately, some of the failures of the South African administrators can be turned to Namibia's advantage. Because they have started with almost a clean slate in many areas, educational planners are not constrained by substantial investment in old infrastructure. Namibia has the opportunity to construct a sound educational basis for long-term self-reliance and development, avoiding others' mistakes and exploiting the latest pedagogical and technological developments.

As detailed above, the government is making extraordinary strides on its own in meeting the nation's educational needs. Nonetheless, assistance from abroad can provide additional resources to speed the new system toward success. (Annex III provides an overview of current assistance projects in the education sector.) Wisely, the government and people of Namibia are careful to avoid inappropriate forms of assistance. Such aid could lead to new dependencies, inappropriate priorities, or damage to the nation's cultural and linguistic heritages. To minimize these risks, the government has articulated a framework for development assistance. It stresses:

1) Aid projects should promote self-sufficiency in those areas to which they are directed, rather than structural dependency on project capital, advisors, etc.

2) Aid should promote "capacity building" within the country. Namibian counterparts to foreign development workers should be seen as an integral part of each project. The counterparts must learn the specifics of the project. More important, they must understand the underlying theoretical implications, including the interrelation of socio-economic factors affecting educational development. This system will help assure that the transfer of technology includes "know-why" as well as "know-how." The work will be continued by Namibians after the project has ended. The government seeks to "[maintain] firm control over our objectives, priorities, and programmes. . . ."

Many nongovernmental organizations, institutions, and individuals in the United States are well positioned to help Namibians achieve their educational goals. Individual volunteers, missionaries, foundations, churches, universities, community groups, and non-profit educational organizations are already at work. Since independence, moreover, official aid from the United States government has begun to flow towards the education sector in Namibia. (A brief summary of representative activities in Namibia by governmental and non-governmental agencies from the United States appears as Annex IV).

The basic message to overseas donors from the professionals implementing Namibia's educational initiatives is simple: *"Send money!"* A shortage of resources, including reference and text books, photocopy machines, visual aids, computers, desktop publishing equipment and vehicles, limits workers' ability to do their jobs. All too often Namibians know what needs to be done and have the requisite skills, but lack the wherewithal. Individuals and groups in the United States can make significant financial and in-kind donations.

Americans have already contributed libraries to secondary schools. Individuals are offering their talents and services. WorldTeach, for instance, has over 80 volunteers assisting in teacher training and in teaching English and mathematics at the secondary level. *Donations and contributions must be coordinated through the Ministry of Education and Culture, however, to insure that they can be integrated properly with other materials, activities and equipment, that equitable distribution occurs, and that there is timely communication with all appropriate organizations and government departments.* Unannounced, uncoordinated gifts of resources actually impose severe time and financial burdens on the recipients.[22]

With almost no contribution in cash or in kind, however, students in the United States can open important channels of communication for Namibia's youth. These linkages are desired at all age and academic levels. From adopt-a-school programs and pen pal efforts to individual and group student exchanges, opportunities to interact with other students constitutes a valuable—and valued— learning resource for young Namibians. The Student Representative Council (SRC),

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UNAM's elected governing body of students, seeks contacts with students elsewhere in the world. UNAM's students want foreign counterparts on their campus, wish to participate in student exchanges, and hope to become active in worldwide student activities. They would welcome bilateral linkages with student governing associations in the United States and with federations of student governments.

Student groups in the United States can help Namibian students participate in international activities. For example, the World University Games of the International University Sports Federation are being held in Buffalo in July 1993. UNAM students were delighted to have been invited and they wish to send a cultural troupe of 22 singers and dancers, plus 10 athletes. In return for assistance in meeting the substantial costs of participation, the Namibians would be able to stage extra performances and travel elsewhere in the United States.

With respect to programs of technical assistance, Namibian government documents and informal conversations with policy-makers suggest five broad and inter-related areas in which the United States can draw further upon its relative strengths to assist the creation of a new education system in Namibia: school desegregation; curriculum development; teacher training; higher education and advanced training; and advanced information technologies. U.S. schools of education, in particular, have valuable expertise to share.

School Desegregation

The United States has yet to achieve true school desegregation or to perfect mechanisms to combat past discrimination. However, it has vastly more experience in pursuing these goals than most societies. Namibia is trying to establish a fair means of desegregating and financing its schools, while some groups such as 'Cultura 2000' are demanding "special considerations with respect to language and cultural rights." In resisting educational equity, others are transforming public schools into private institutions charging fees that are prohibitive for most Namibians.

In the continuing struggle for equal public education, Americans have learned much about how powerful groups attempt to perpetuate their educational privileges through funding and other mechanisms. Our experiences, including many failures and many successes, should be part of the information base from which Namibians make their decisions in this sensitive area.

In a society which underprepares many students, American colleges and universities are struggling to develop valid admissions procedures. We have learned that evaluation of previous schooling results, alone, provides an incomplete measure of a candidate's ability. Weighing additional factors—such as the quality of the high school, rank in class, work experience, and individual circumstances—has permitted universities in the United States to assess more accurately candidates from educationally underprivileged backgrounds. The same considerations have served in assessing returning or mature students, students with physical disabilities, students with children, and commuters. Our experience with both the politics and mechanisms of multiple admissions criteria could be put to good use by Namibians.

Throughout the United States, universities and community colleges offer "bridging" programs, such as Upward Bound and the Educational Opportunity Fund, to bring underprepared and first generation students to the levels required for academic success. These programs offer credit and non-credit preparatory courses, usually designed and administered by the relevant academic department. Most help students develop skills for study, test-taking, critical thinking, writing, reading, and research. Research in this country has shown that peer study groups and collaborative scholarship improves the performance of underachieving students. Therefore, most of these initiatives rely on small classes, tutorials and support groups to improve the learning environment. Extra class periods and dormitory-based study groups led by graduate students have also proven their effectiveness.

In addition to special academic programs, new counselling and advising programs are emerging. Training for faculty advisors is more and more frequent. Interestingly, peer advising programs have sometimes proven even more effective. Utilizing students in 'big-brother, big-sister' roles has overcome many of the disadvantages of mentoring relationships between faculty and students. Computers are also being used to help under-prepared students with their basic skills. Nearly two hundred software programs for developmental or remedial courses are already available. Fortunately for Namibia, these courses are in English.

Curriculum Development

For Namibians, curriculum transformation may surpass in long-run importance even the more immediate issues of class size, desegregation, and language of instruction. At stake are the fundamental points of departure for the education system. The most obvious and pressing need is to rid the educational system of its colonial, anti-African character. But just as Africans are largely invisible in Namibia's current syllabi, so too are women. This gender bias is just as important. The issue is not merely one of having more information about women in the classroom. Elizabeth Minnich writes of the fundamental need in other spheres for ". . . a complete rethinking, first of the basic models of reality, truth, and meaning in the dominant tradition, and then of all the knowledge predicated on them." Knowledge, argues the same author, "...that is claimed to be inclusive—claimed to be both about and significant for all humankind—but that is in fact exclusive must be transformed—not just corrected or supplemented."

Perhaps our own halting efforts to promote inclusive education can prompt and inform similar efforts in Namibia.[23] In many parts of the United States, the majority of schoolchildren are people of color. We have increasing numbers of poor and dispossessed. Consequently, in recent decades, teachers and instructors at secondary and tertiary institutions have reexamined the content of their lessons. New and challenging perspectives are being integrated into classroom discussions: Martin Bernal's well-documented *Black Athena*, for example, argues that Europe's classical civilization has Afroasiatic roots; Sandra Harding's *Whose Science? Whose Knowledge?* critiques the distinctly Western and androcentric sciences dominant today.

Completely new disciplines and subdisciplines have developed, like women's studies, labor studies, Native American literature, African American history and Latino culture. Furthermore, teaching materials and modified pedagogies have emerged that are sensitive to the diverse backgrounds and needs of heterogeneous student bodies.

Namibia is correctly striving to transform the curriculum now to minimize later revisions. A truly inclusive education, however, inevitably questions the old ways. Privileged groups usually misperceive and fear the new perspectives. Sharing our experiences will aid Namibia's attempts to define and promote constructive learning and new ways of thinking at every level of its education system.[24]

Teacher Training

The United States has experimented with a range of approaches to improving the size and quality of its teacher corps. It might usefully share ideas drawn from programs featuring new recruitment strategies, financial and non-financial incentives to attract and retain teachers, incentives for further training, and the promotion of innovation in the classroom. We also have a wealth of training programs for teachers of English as a Second Language, an area of especially high priority given Namibia's new language policy inititatives. As documented more fully in Annex IV, both the United States government's Peace Corps and the nongovernmental organization WorldTeach are focusing on English language teaching in Namibia. Experience drawn from the Head Start programs throughout the United States could help shape the training of early childhood educators in Namibia.

In most countries, pre-service and in-service teacher education has been fragmented. There is insufficient connection between what teachers learn in training and the experience in the classroom. There is often little support for teachers after training and little opportunity for continued learning. Namibia has the opportunity to promote collaborative efforts likely to be more beneficial than the separate approaches of the past.

Building upon initiatives like those of the Homes Group, experts from the United States can help Namibian educators and policy-makers develop comprehensive approaches to teacher education throughout the teacher's career. These could help Namibia make full use of the regional teacher centers, distance education programs, and higher education institutions already in the works. Experts from the United States can draw on existing links between teacher training institutions and schools in this country, and on new partnerships being established between professors and teachers, to facilitate continuing learning, break down barriers between theory and practice, and share instructional methodologies.

Higher Education

In its quest to place educational excellence at the service of Namibia's development, UNAM will rely heavily on international networking with universities in Africa, the United Kingdom, France, Germany, the United States and elsewhere.[25] The Vice-Chancellor, Dr. Peter Katjavivi, has emphasized the many ways that faculty, staff and student exchanges will strengthen UNAM:

> These agreements will play an important role in the first few years in two major areas: First, FACULTY AND STAFF EXCHANGES will provide us with visiting professors with expertise that we presently lack in Namibia. We will also be sending some of our faculty and staff to cooperative institutions for further studies.
>
> STUDENT EXCHANGES will also be important during our infancy. Since it will be economically unfeasible to begin with full faculties in the areas of medicine, veterinary science and engineering, our linkage agreements stipulate that students who complete satisfactory work in the basic foundational work at UNAM will be accepted as students at Universities abroad to complete their professional degrees. The cost-effectiveness of such arrangements is very attractive to a young institution such as ours. At the same time, we've had inquiries about the feasibility of receiving students from Universities in the United States for one semester or one year of studies at UNAM.
>
> We are open to all of these possibilities. Beyond the short term benefits, these exchanges will initiate the international culture that we hope to nurture at the institution. Having been isolated for so long, Namibia is just now coming into its own on the international scene. In will be important for students to be exposed to a world, rich with diverse cultures and ideas.
>
> At the same time, the University of Namibia will encourage and enable students to delve more deeply into their own cultures, researching into the languages and traditions which have been down-played if not devastated by colonial occupation. UNAM

will seek to bring these contributions to the international community, and to instill in students a sense of pride in their own heritage.[26]

Dr. Katjavivi has asked donors and project designers to give particular emphasis to mathematics and science education, bridging programs, the university's language center, its faculty of education, and the satellite campuses throughout the country. UNAM is especially eager to establish agreements permitting students in fields offered only at the Part One level to complete their programs overseas. It also envisages "split degree" programs with a similiar objective.

There are many other immediate ways that tertiary institutions in the United States can assist their Namibian counterparts in improving the quality of both their students and faculty.

Applied research is a rarity in Namibia today. Universities in the United States, especially land grant institutions, can help UNAM develop and execute applied research programs in a range of sectors.[27] Reginald Green developed an illustrative list of university-based research projects that promote environmentally sustainable local economic development: improved millet and sorghum seeds; intermediate technology for household sorghum and millet processing; devising and testing a model of underground aquifer recharge rates and their variability with drought; and the interaction of food insecurity with employment and real wage levels. In collaboration with colleagues from universities in the United States, this list can be greatly expanded and the hard work of implementation begun.

Applied research, however, faces a number of challenges. UNAM faculty will have severely limited resources for research and demanding teaching obligations. In many instances applied research must be linked to changes in policy; however, relationships between Namibian researchers and policy makers are still being worked out. Researchers from the United States could help overcome some of these difficulties. They can assist UNAM's efforts to establish viable research institutes, demonstrating effective multidisciplinary research strategies and focusing attention on key developmental areas. Counterparts in the United States can help these institutes establish working libraries and collaborative links.

Florida State University has undertaken a joint effort with the Washington-based Academy for Educational Development to provide services to MEC's Basic Education reform. The project typifies the kind of applied, policy-oriented research in which universities in the United States often excel. Linking the effort with researchers at UNAM might have an additional impact on the strength of that institution.

To assist faculty development in Namibia, collaborative arrangements could link successful completion of degree or research programs in the United States with promotion and tenure at UNAM. Partner universities in the United States could provide replacement faculty for those Namibians while they are pursuing studies in the United States.

United States partners and individual counterparts can help a range of Namibian institutions explore how their diverse contributions to human resource development interact. The Polytechnic, UNAM, government-run adult and vocational education efforts, and business-based employee training programs must complement each other as efficiently as possible if Namibia is to make best use of its human and financial resources. Current policy debates in the United States concerning national youth service initiatives and other training efforts can stimulate and inform comparable discussion and policy development in Namibia.

A range of valuable models for university to university linkages is taking shape between institutions in the United States and South Africa. The Institute of International Education (IIE), for example, has since 1989 worked to foster linkages designed to help historically black universities in South Africa move from a thesis-based to a course-based Masters curriculum. A consortium of these universities met to identify priority fields for these linkages, which will take place at the departmental level with one or more universities in the United States. The linkages would be flexible, entailing exchanges of teaching faculty, graduate students, research scholars, or administrators in whatever combination is mutually agreeable to the South African and American partners.

One South African linkage in the planning stages would bring together resources from the University of Georgia, Clark-Atlanta University, and Rutgers University's Newark campus to assist the department of mathematics education at the University of the Western Cape. The joint effort would assist bridging programs for students who arrive on campus with insufficient training in mathematics. The same subject area is enormously salient in Namibia. Numerous such linkages between UNAM and counterparts in the United States would greatly assist Namibia's progress by bringing a range of research perspectives and teaching approaches to the Namibian academic community.

The North American Consortium for the University of Namibia, with its secretariat at the University of Rutgers-Camden, aims to provide UNAM with ongoing academic assistance from various universities in North America. This assistance will include but not be limited to identifying potential permanent staff, arranging possible staff exchanges and sabbaticals, arranging possible student exchanges, and assisting in identifying potential sources of funding in North America for UNAM. The Consortium is a direct outgrowth of the conference on "Development Perspectives for an Independent Namibia" at Rutgers-Camden in September 1992. It works closely with UNAM and its North American fund-raising affiliate, the Fund for the University of Namibia.

UNAM aims to build upon the linkage agreements already

signed with Rutgers, the University of Ohio, the Evangelical Lutheran Church's Division for Colleges and Universities, and the University of Maryland-Eastern Shore. Several others are being explored, including possible ties to Columbia University, the University of California-Berkeley, the University of Pennsylvania, and Howard University.

Namibians have long recognized that the nation cannot meet all its advanced training needs through institutions within the country. Many Namibians pursuing university education may well continue to do so outside the country. In 1990, 3,227 Namibians were studying at South African universities, and over 4,000 were studying in other foreign universities.[28] The United States has hosted many Namibian students and should continue to provide study abroad opportunities. IIE undertook a survey of Namibians who had studied in the United States. (The results are discussed in detail in Annex V.) Responses underscored the value of these programs, but demonstrate that greater care must be given to assuring that the student's objectives match needs within the country.

Analysis of the 1991 census data should help the government identify its most urgent needs for advanced training within the country and overseas. For undergraduates, these fields will mainly be in the sciences and technical areas. But with existing information, it is difficult to precisely define the appropriate role for United States universities in the provision of baccalaureate and advanced degrees to Namibians. This depends, for example, on when the agriculture and engineering degree courses will be established at UNAM. Until this occurs, students in these key areas must be educated abroad.

The National Planning Commission has not yet completed the detailed evaluation of the census that will yield estimates of personpower needed in certain fields. A mission from WHO suggested that "the annual demand for doctors, dentists and pharmacists would be a total of thirty-four, twenty-seven as replacement requirements and seven as a growth requirement." Other health related specialists, such as dieticians, speech therapists, and occupational and physiotherapists, would likely be required at a higher annual rate.

An estimated 40 to 60 agricultural economists, agricultural engineers, soil scientists, and crop scientists will be needed annually for agri-business and the commercial farms until saturation is reached. Twenty to 30 engineers may be needed annually for some time to come. And a total of 100 to 150 postgraduate posts in other specializations are also likely to be required. It may take a full decade of sending students abroad before these needs will cease to be urgent.

For training in the U.S., greater use should be made of innovative models. Short, practically oriented courses can rapidly increase the skills of locally trained professionals. For some years now, for example, IIE's South African Career Development Fellowship Program has brought black South African professionals to the United States. They engage in noncredit studies at a university or community college and interact "in the field" with American counterparts. The programs are individually tailored to meet specific job-related needs of the participants. After four to five months the professionals return, enriched and invigorated, to their posts at home.

Advanced Information Technologies

In just a few years, computers and associated information technologies have dramatically expanded the options for providing access to information and tools for its manipulation. Experts now look ahead to a time in the near future when "all the representation that human beings have invented will be instantly accessible anywhere in the world on intimate, notebook-size computers." Information technologies are a major underpinning of educational—and ultimately economic—development.[29] Societies that are not computer literate will stand little chance of competing in the 21st century.

Universities and schools throughout the United States are radically altering their methods of teaching and learning as a result of these technologies. Computers were long associated with advanced research requiring complex data analysis. But universities and community colleges in the United States employ advanced technologies at every level of instruction. Leading universities in the United States are currently spending more than $500 per student on their central computing infrastructure. Some 60 percent of all colleges and universities in the United States have some kind of campus-wide information system or are in the process of installing one.[30]

The value of inspired teachers, stimulating classwork, and study abroad will not diminish. These traditional modes of training, however, are no longer the only options. Nor are they always entirely sufficient.[31] New technologies, and innovative applications of older ones, have implications for every level of the Namibian educational system. The report of the commission on higher education, and other major planning documents in Namibia, seem not to have taken full account of the available technology. But UNAM has begun to explore the possibility of international support for incorporation of new information systems though the new technologies program in UNESCO's Priority Africa Initiative. Institutions in the United States can make a significant contribution by making contemporary information technology available to Namibia and by encouraging the planning of an education delivery system that makes appropriate use of this technology.

New information system applications already in use in the United States may serve Namibian students for everything from remedial work to cutting-edge research. For math tutoring, a new computer program called "Mathematics" "... eliminates the need for difficult, but peripheral, calculations and lets [students] concentrate instead on mathematical concepts." Computer animation has revolutionized the way mathematical

concepts are taught by using television and videotapes. Similarly, computer programs are now helping in the teaching of physics and in motivating students to study science. Experiments that would have taken several hours in a well-equipped laboratory take less than five minutes on the computer and reduce the need for expensive laboratory equipment. Computer animations now show students things scientists have been unable to observe—such as the behavior of atoms and molecules—and have been incorporated into college-level introductory physics courses. Even physics majors ". . . learned the subject matter more thoroughly with computer-assisted teaching than without it."

The impact of distance education in the United States is being increased through technologies that might be readily adaptable to Namibia. In the United States, cable television is already delivering complete degree courses nationally. Engineering and business schools are among those offering degrees in this manner. A satellite network called AgSat has enabled land grant colleges in the United States to broaden their reach and extend their curricula at far less expense than conventional approaches would have required. In a typical instance, an instructor taught an agriculture marketing course on his home campus while students at another university 2000 miles away participated via an interactive system of television and telephone. In addition, 200 farmers and business people audited the same course from their homes and offices.

The New Jersey Intercampus Network plans to connect all of the state's colleges and universities via two-way, interactive video. Ultimately, this will be expanded to include high school students and teachers. Advances in networking permit a range of similar interactive links at other levels of the educational system.[32] The National Public Telecomputing Network is already providing low-cost services to K-12 systems throughout the world. Their special electronic information center, called Academy One, is particularly exciting. It includes an electronic mail area for pen pals, a simulated space shuttle program, a student news network, and areas for student writers and artists to post their work.[33] Teachers in the United States increasingly are expected to be familiar with these technological advances and to employ computers as teaching tools just as they would chalk, books, and dictionaries.

Educators in the United States predict increasing use of distance-learning systems. UNAM and the Distance Education College will eventually have a number of satellite campuses. There is already a vibrant tradition of distance education in southern Africa. The majority of African holders of undergraduate and advanced degrees in South Africa, for example, received them from either the University of South Africa (UNISA) or VISTA, both primarily distance education institutions. UNISA's alumni include numerous leaders in neighboring countries. Namibia already utilizes interactive video in limited contexts and has reliable telephone service to many areas of the country. Radio can reach most remote areas.

The new system of education should integrate modern technology to the maximum degree practical at every level. Cost, technological knowledge, and the lack of appropriate "hardware" are daunting constraints. But Americans can encourage Namibia to exploit its lack of investment in outmoded technology by leaping immediately into the technology of the future.[33] With costs plummeting for computer and related technologies, advanced methods are increasingly affordable.

Increases in educational effectiveness may make these technologies a bargain in the long run. Namibians could work with American experts to integrate existing technologies as effectively as possible with more advanced systems, and gain the skills necessary to maintain and upgrade both. Namibia can even serve as a model and catalyst for regional cooperation based on these technologies. Retaining outmoded approaches could consign Namibians to a permanent educational underclass.

Other Contributions

Namibia's adult education programs must effectively complement preparatory education for young people. American experts on popular education can help Namibian educators and policy makers from various ministries achieve balanced educational development. This might include special attention to the proposed Folk Development Colleges and Distance Education College, and could draw on the varied roles played by state and local adult education programs, employee training, and community and junior colleges in the United States.

Assistance to Namibia need not require the scale or expense of sweeping curricular transformation or major technological transfer. Individuals and small groups in the United States can also make meaningful contributions to meeting Namibia's education needs through programs like pen pal efforts in a single elementary school or community book donations arranged through MEC. Professional associations, particularly in adult education and training, might subsidize participation in their annual congresses by Namibian counterparts. Churches and universities can continue their generous support for Namibian students in their communities in the United States.

CONCLUSION

Namibia's needs are great. American resources are impressive. At their intersection, we have found prospects for continued collaboration between Namibians and those in the United States who wish their educational efforts well. But the interventions suggested here are not acts of simple charity; any interaction, from a pen pal arrangement between a pair of Lutheran parishes in the two countries to a drylands agronomy

course taught by Namibians and Nebraskans using interactive television, succeeds only if the element of exchange is genuine. Namibians and Americans can reflect proudly on the distance they have traveled together. Finding the way forward is not easy. But finding it together can enrich both societies.

Annexes

I. PROGRAMS BENEFITTING REFUGEES

The African American Institute (AAI) has administered scholarship programs for Namibians since the 1960's. In 1961 the United States government initiated the Southern African Student Program (SASP), which brought over 400 refugees from South Africa, Zimbabwe, Angola, Mozambique and Namibia to the United States to pursue university studies. Lincoln University and the University of Rochester established centers for receiving and orienting SASP students. They also provided remedial, English and introductory courses as appropriate. Four out of five SASP students completed a tertiary program—65 percent with bachelor's degrees, 25 percent with master's degrees and 10 percent with certificates or diplomas. Between 1964 and 1976, 41 Namibians received degrees through this program.

In addition, the United States government funded the AAI-administered Southern African Training Program, which operated two secondary schools for southern African exiles, one in Tanzania and one in Zambia. Between 1961 and 1971, 1500 students were enrolled in each of these schools. Namibians probably constituted 7 or 8 percent of these students.

Between 1976 and 1990, the Southern African Training Program supported 126 Namibians in post-secondary studies in the United States and various African countries. The fields of study included public administration, nursing, teaching, law, economics, obstetrics/gynecology, pharmacy, dentistry, animal husbandry, electronics, community development, agriculture, communications, business administration, food science, and city planning.

The Evangelical Lutheran Church in America, in partnership with the Evangelical Lutheran Church in the Republic of Namibia (ELCRN), the Evangelical Lutheran Church in Namibia (ELCIN), the Lutheran World Federation, the Agency for Cooperation in Development of the government of the Federal Republic of Germany, and the Evangelical Lutheran colleges and universities, established a baccalaureate scholarship program which has sponsored 100 Namibian students since 1986. By June 1992, half had graduated with bachelor's degrees from colleges and universities of the Evangelical Lutheran Church in America.

The Phelps-Stokes Fund has sponsored 37 Namibians (primarily refugees from Zambia) for study in the United States. Most students have earned degrees in sciences, math, business administration, agricultural sciences, architecture and education.

IIE's Namibian Education Program, with funding from the Ford Foundation, has assisted 15 Namibians at American universities. Six are still enrolled and are expected to graduate in 1993 and 1994. Three are pursuing master's degrees, and seven are pursuing bachelor's degrees in fields including computer science, accounting, mathematics, political science, medical technology, labor relations, psychology, social work, and business.

From 1970, with the establishment of the Fund for Namibia, and continuing with the Nationhood Program in 1977, the United Nations has been one of the largest sponsors of Namibian students. The Nationhood Program has financed 490 Namibians in various countries. The majority have been placed in African countries. As of December 1990, however, the Fund for Namibia had sponsored 74 Namibians in the United States. Their fields of study include: accounting, agriculture, architecture, biology, business, chemistry, communications, economics, education, electrical engineering, journalism, nursing, nutrition, public policy and urban studies. The Fund also supported eight students in teaching of the hearing impaired and seven in other special projects.

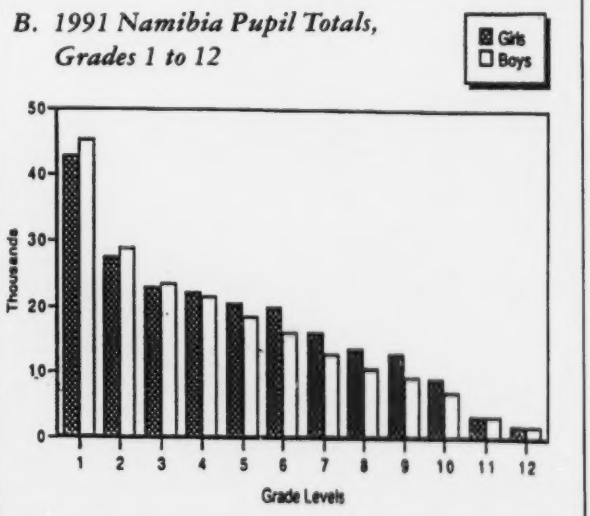
II. CURRENT STATISTICS ON BASIC EDUCATION

A. Statistical Data 1991, Ministry of Education and Culture

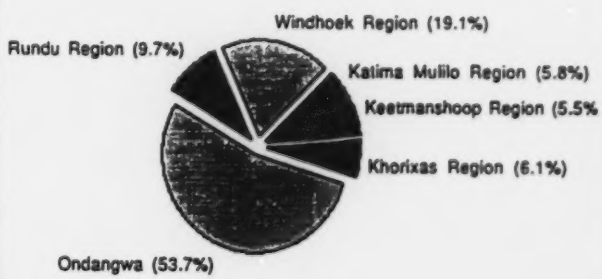
STATISTICAL DATA 1991
MINISTRY OF EDUCATION AND CULTURE

Geographic Areas	Schools	No. of Teachers	Total Pupils	Pre-primary	PRIMARY		SECONDARY		Special Classes	ETC to N3	Special School Yr Levels	Handi-capped
					Lower G 1-3	Upper G 4-7	Junior G 8-10	Senior G11-13				
NAMIBIA	1 229	13 925	418 674	5 749	191 127	148 052	61 939	10 347	424	745	201	90
Katima Mulilo Region	83	990	24 209	17	7 505	9 408	5 423	1 856	-	-	-	-
Caprivi District	83	990	24 209	17	7 505	9 408	5 423	1 856	-	-	-	-
Keetmanshoop Region	82	1 115	22 886	704	7 901	9 367	3 958	845	111	-	-	-
Bethanien District	3	31	617	10	275	297	35	-	-	-	-	-
Karasburg District	11	146	2 947	103	985	1 229	508	100	22	-	-	-
Keetmanshoop District	17	263	5 581	190	1 577	2 038	123	494	46	-	-	-
Luderitz District	10	126	2 385	152	908	982	343	-	-	-	-	-
Maltahohe District	1	34	805	-	332	362	111	-	-	-	-	-
Mariental District	22	283	5 915	249	2 211	2 561	78	93	18	-	-	-
Namaland District	18	232	4 636	-	1 613	1 898	942	158	25	-	-	-
Khorixas Region	80	1 160	25675	542	9 556	10 479	4 205	872	21	-	-	-
Damaraland District	27	449	10 691	126	3 662	4 447	2 038	418	-	-	-	-
Kaokoland District	18	161	3 747	-	1 771	1 462	514	-	-	-	-	-
Karibib District	8	118	2 944	56	1 221	1 421	246	-	-	-	-	-
Omaruru District	6	104	2 160	31	680	744	581	124	-	-	-	-
Outjo District	9	107	2 195	30	1 087	934	99	45	-	-	-	-
Swakopmund District	12	221	3 938	299	1 135	1 471	727	285	21	-	-	-
Ondangwa Region	566	5 516	225 006	313	116 490	76 611	29 375	2 060	21	135	1	-
Owambo District	566	5 516	225 006	313	116 490	76 611	29 375	2 060	21	135	1	-
Rundu Region	245	1 385	40 760	1 446	23 049	12 179	3 671	329	-	86	-	-
Bushmanland District	4	22	528	-	343	153	32	-	-	-	-	-
Kavango District	241	1 363	40 232	1 446	22 706	12 026	3 639	329	-	86	-	-
Windhoek Region	173	3 759	80 138	2 727	26 626	30 008	15 307	4 385	271	524	200	90
Gobabis District	14	219	5 128	85	1 782	1 772	1 286	203	-	-	-	-
Grootfontein District	10	197	4 522	110	1 956	1 998	374	75	9	-	-	-
Hereroland-East Dis't	13	278	7 091	-	2 725	3 297	1 069	-	-	-	-	-
Hereroland-WestDis't	10	241	5 601		1 967	2 438	868	128	-	203	-	-
Okahandja District	9	189	4 375	131	1 607	1 949	607	60	21	-	-	-
Otjiwarongo District	10	235	5 500	113	2 141	2 005	923	307	11	-	-	-
Rehoboth District	35	506	9 872	154	3 223	3 517	2 034	809	76	59	-	-
Tsumeb District	9	181	3 989	130	1 320	1 491	827	216	5	-	-	-
Windhoek District	63	1 713	33 057	2 004	9 905	11 541	7 319	2 587	149	262	200	90

B. 1991 Namibia Pupil Totals, Grades 1 to 12



C. 1991 Namibia Pupil Totals; All Pupils = 418,674



III. INTERNATIONAL ASSISTANCE TO THE NAMIBIAN MINISTRY OF EDUCATION

Development Partner	Relationship	Effective Date
ALGERIA	•Joint Commission of Cooperation	
BELGIUM	•Agreement between the Government of Namibia and the Flemish Association for Development Co-operation and Technical Assistance (VVOB)	
BOTSWANA	•Cultural and Educational Cooperation	26/07/90
BRAZIL	•Joint Communique—Protocol on Cultural & Educational Cooperation	16/09/91
BRITAIN	•Technical assistance in education, 1991/92 - 1993/94	23/04/91
	•Memorandum of Understanding: Repatriation of Namibian Children	28/08/91
ODA	•Volunteer Service Overseas (VSO)	21/06/91
Commonwealth Secretariat	•Memorandum of Understanding: Commonwealth Fund for Technical Cooperation	22/06/90
CANADA	•International Development Research Centre	
CHINA	•Cultural agreement and donation of sports equipment. Value: R15 000	27/03/91
CUBA	•Establishment of the Joint Commission	06/03/91
	•Economic, scientific, technical, cultural and trade cooperation	
	•Namibian Schools in the Isle of Youth	Feb. 1991
CZECHOSLOVAKIA	•Joint Cuba Namibian Commission	14/09/91
DENMARK	•Capital projects WUS Solidarity	05/04/91
	•Development on Danish support for Ecole Secondary Technique de la Namibie, Loudima	09/04/91
	•Personnel Assistance (Volunteer Programme)	09/04/91
	•Support to NIED: Life Science in Junior Secondary Schools, Agreement on general terms and procedures of development	22/01/91
EGYPT	•Agreement on cultural, scientific and technical cooperation	14/12/90

III. International Assistance, continued

Development Partner	Relationship	Effective Date
EUROPEAN COMMUNITY	• Budgetary support	16/11/90
	• Capital projects for financial year end 31/03/90	11/10/90
	• Project INSTANT: Maths and Science	16/11/90
	• FUA, Teacher training	16/11/90
FINLAND	• Capital projects	27/02/91
FINNIDA	• Budgetary support	25/01/91
	• Ongoing projects: General Terms	19/11/90
	• Loudima	19/11/90
	• Textbook development	19/11/90
	• Practical subjects	19/6/90
	• Engineering Courses	19/6/90
	• Fact-finding mission May 1990 enhancing, access, self-reliance. Bachelor of Science Programme	12/07/91
	• Proposal for establishment of Adult Education Training Centre: Rundu	
FRANCE	• Financing agreement on projects in Namibia: Namibia Cultural Centre	01/02/91
	• Local scholarships	01/02/91
GERMANY	• Agreements on technical cooperation	18/04/91
	• Agreements on cultural cooperation	05/06/91
INDIA	• Cultural agreement	25/01/91
Africa Fund Non-aligned Movement	• Agreed minutes	14/12/90
KENYA	• Proposed agreement on technical cooperation	
KOREA	• Cultural cooperation agreement	08/05/91
MOZAMBIQUE	• Agreement on economic, scientific, technical and cultural cooperation	30/08/90
NAMIBIA: Namibia Christian Exchange	• Consultation on coordination of pre-school facilities in Namibia	Feb.1991
Standard Bank	• Book Project	Ongoing
NIGERIA	• Volunteer Teachers	20/06/91
NORWAY	• Budgetary support	25/09/90
	• Capital projects(Namas)	08/01/91
	• Budget support (Norad)	25/09/90
	• Country programme consultations	20/02/91
	• Financial aid: Loudima,Curriculum, Curriculum development advisor	20/02/91
	• Jakob Marengo Tutorial College	25/04/91
	• 3 teachers/expatriates	02/05/91
SOS Kinderdorf	• Memorandum of agreement	
SOS X International	• Children's Village Association in Namibia	

III. International Assistance, conclusion

Development Partner	Relationship	Effective Date
SWEDEN	• General terms and procedures, volunteers and other assistance from Sweden	06/03/91
Africa Groups of Sweden	• Consultant: for secondary schools	06/03/91
SIDA	• Development Cooperation: Vocational Training Educational Projects Education Sector Support	24/04/91
	• Budgetary support	21/02/91
	• Text Book Programme	08/01/91
	• Budgetary support	19/10/90
	• Scholarship Programmes	19/10/90
	• Sector support: Training of teachers	24/04/91
UNDP	• United Nations Volunteer Teachers	28/06/91
	• Pilot In-Service Training Programme	26/06/91
UNESCO	• Draft consultation of Namibian National Commission for UNESCO	07/03/91
	• Survey of Pre-Schools	07/03/91
	• Provision of Educational Tools	07/03/91
	• UNICEF Country Programme Cooperation	21/06/91
UNITED NATIONS	• Agreement: United Nations Information Centre in Namibia	21/08/91
USA	• Programme Grant Agreement:	
USAID	• Education Reform Sector Assistance	22/03/91
	• Grant Project Agreement: Basic Education Reform: Assessment, Evaluation, Monitoring	28/09/90
	• Memorandum concerning environment conservation and natural resource management	13/09/91
Ford Foundation	• Memorandum of Agreement: USA Ford Foundation	
Peace Corps	• Volunteer teachers	22/02/91
Florida State University	• Contract for Services: Namibian Primary Education Reform	04/06/91
USSR	• Agreement on cultural and scientific cooperation	22/02/91
	• Programme of cultural and scientific cooperation	02/09/91
VENEZUELA	• Agreement on cooperation and friendship	
ZAMBIA	• Agreement on cultural cooperation	
ZIMBABWE	• Agreement on economic and technical cooperation	

IV. REPRESENTATIVE CURRENT U.S. EDUCATIONAL PROGRAMS IN NAMIBIA

The United States Agency for International Development (USAID) has committed 35 million dollars over five years to assist the government's Basic Education Reform program. The project seeks to build capacity to plan and manage the reform; improve existing educational materials, develop teacher training programs, design an effective examination system; and develop a resource base to assure affordability in the short-term and sustainability in the medium-term. The Namibian government is contributing 39 percent of the total cost of the reform program (58.5 million dollars). This project was designed in cooperation with Sweden, Britain, Finland, the EEC, UNICEF, and UNESCO.

Peace Corps-Namibia is also very active in support of Namibian efforts to reform the education system. Just over two-thirds of the 60 total volunteers currently in Namibia work in support of MEC's Basic Education Reform program by teaching English, math, and science subjects in secondary schools. An additional eight volunteers are working to improve teacher training methods in colleges and as in-service teacher trainers. The Peace Corps's primary objective in Namibia is to support the government's effort to convert from Afrikaans to English as a medium of instruction.

WorldTeach, a nonprofit organization based at the Harvard Institute of International Development, is promoting the transition to English-medium education by sending English teachers for one-year periods to rural areas in Namibia. Although some are involved in subject teaching, most volunteers serve as "English Resource Teachers" in primary schools. Most of their time is dedicated to tutoring teachers and creating an English environment at the school through plays, debates, book clubs, etc.

WorldTeach receives no government funding. As a result, volunteers are required to raise approximately $4,000 of their subsistence costs as a condition of acceptance. This is supplemented by an in-country sponsor which provides room, board, and a modest stipend. The majority of sponsorships continue to come from the Anglican, Lutheran, and Catholic churches. However, support from various foundations and companies in Namibia is increasing in view of WorldTeach's proven success.

V. SURVEY OF NAMIBIAN ALUMNI OF DEGREE PROGRAMS IN THE UNITED STATES

With the aim of planning more efficiently for post-independence training of Namibians in the United States, the Institute of International Education (IIE) in 1991 conducted a survey of repatriated Namibian students who had received degrees from American universities.[34] The majority of those surveyed (85 percent) arrived between 1960 and 1975. Sixty percent spent between two and five years in the United States in academic programs. Seventy-four percent received at least a bachelors degree.[35] Many students (55 percent) adhered to their original program of study, though a sizable number (39 percent) changed at least once.

Over 60 percent of the respondents describe their U.S. training as "relevant" or "very relevant" to the position they now occupy. Time spent in the United States was beneficial, according to the respondents, because, in addition to stimulating course content, they were exposed to skills in group interaction and conflict resolution, new teaching methods, and ideas about a free market economy. Experience with computer technology was also beneficial. Even those who did not find their training relevant (14 percent) indicated that the broad-based education in the U.S. helped in their present employment.

While over 80 percent felt their education would be an asset in their future careers, a minority (15 percent) still felt discriminated against because of their American degree. Even after Namibian independence, white control of many areas of employment resulted in discrimination and questioning of Namibian students' qualifications obtained in America. Nearly one in four experienced difficulty in obtaining employment. Many alumni of American institutions have waited months and even years before obtaining a job suitable for the training they received. This climate is slowly changing as the twin policies of reconciliation and affirmative action are embraced more widely.

Namibians faced cultural and other obstacles in the United States. Some found western education insufficient for addressing development issues facing Namibia. Americans' lack of knowledge of Africa was frequently mentioned. (Some respondents said they gave lectures and wrote articles to inform those curious about Africa). Other difficulties encountered included financial problems, harsh winters, homesickness, and visa prohibitions on employment.

Reintegration into Namibia has been difficult for most respondents. On the other hand, reuniting with family and friends, the ability to contribute to Namibia's development, and living in a nation enjoying its independence has offset some of the re-entry difficulties.

There was no consensus among the alumni regarding the relative priority of scholarships for Namibians in the United States versus funding primary and secondary education in Namibia. Some strongly disagree with a policy of sending people to the United States because the cost of educating one Namibian in the United States could educate many primary and secondary students. Two-thirds of those surveyed, however, strongly support overseas study, arguing that there are not enough Namibians trained at the tertiary level and that Western education can help meet national development

goals. Africans need to be thoroughly acquainted with the United States, the respondents said.

The respondents advised those compatriots coming to the United States to: maximize the advantages made available to them by learning to use the library and by having clear-cut goals and objectives for their studies; to avoid adjusting too well to the United States; to be realistic about the kinds of work to which they will be returning; to join voluntary organizations to better understand America; and to keep abreast of developments at home. They also suggest learning as much as possible about the United States before leaving home, choosing American friends carefully, being prepared for cold weather, and participating in "host-family" programs.

Half of the former students maintain professional ties with Americans. Those who do find that the contact keeps them up-to-date in their respective fields and provides them an opportunity to practice their English. One of the most rewarding aspects of their experience in the United States, respondents said, was the opportunity to meet Americans and people from other parts of the world.

Certain themes emerged from the experiences of the major sponsors of Namibian students. Namibians have generally been underprepared for university work because of the inadequate schooling in the country. In particular, their backgrounds in math, science, and English have been weak. The result is frequently frustrating. Sometimes ". . . a student's academic aspirations were not consonant with potential."

Before independence, many ". . . students [had] refugee-status-related problems of rootlessness, frustration, anxiety and anomie. Many felt very deeply the lack of a tangible goal or set of alternatives between the time of their graduation and the unforeseeable independence of their homeland."[36] On the other hand, many of the students have been highly motivated, and successfully completed their studies, taking full advantage of their experiences in America.

NOTES

1. Its major development constraints, however, are a marginal ecology in some areas, high transportation costs, high export dependency, high population growth rate, uneven spatial distribution of the population and high rates of urbanization. In addition, high spending by the South Africans to protect apartheid in the 1980's led to massive borrowing which the Namibian government must now repay. The substantial national indebtedness - nearly half the annual budget in 1988 - is thus another major development difficulty.

2. In the northern part of the country, where most of the population resides, agricultural output dropped by 50%. ("Nujoma asks farmers for food donations," *Star*, 3 March 1992).

3. The 1991 census indicates that the urban growth rate is about three times higher than the rural population growth rate. ("Massive urban drift confirmed," *The Namibian*, 25 September 1992.)

4. "New era dawns for Africa's last colony," *Democracy in Action*, October, 1989. *Economist Intelligence Unit Country Profile, 1990-91*. Jobs in mining have decreased steadily, from 24,500 in 1951 to 13,000 in 1989 to the present figure. (Leistner and Esterhuysen, 1990:15)

5. Due to South Africa's illegal control of Namibia, for decades foreign fishermen ignored the 200 mile exclusion with impunity, greatly overfishing Namibia's waters. With proper management, however, these areas should recover. Furthermore, the inshore fisheries are still in good condition and are profitable.

6. "800 South Africans," *The Namibian, 7 July 1992*. Government spending is a major brake on the economy. "Thirty percent of the 200,000 people employed in the formal sector work in the public service and the constitution guarantees their jobs." ("Costly public sector", *Business Day*, 30 March 1992) According to the World Bank, Namibia will have to cut civil service wages by 20 percent over the next four years. "Public expenditure must be changed from the current excessive renumeration of bureaucrats to capital expenditure underpinning economic growth".

7. Economist Intelligence Unit Country Profile 1990-91 reports that 250,000 Namibians are engaged in subsistence agriculture, primarily in the north.

8. "New era dawns for Africa's last colony," *Democracy in Action*, October, 1989. Stock farming dominates the agriculture sector, employing 85 percent of the country's total surface area. This sector faces major political and ecological problems however. Despite the urgent political need to redistribute the land which settlers took from the Africans and the equally urgent economic need to provide more jobs for indigenous people on the land, some experts argue that the large, white owned commercial farms are unsuitable for peasant production because of their fragile ecology. (Leistner and Esterhuysen, 1990:14). They claim these areas can only survive with "modern ranching methods." With the growing population, traditional techniques of ranching could indeed be harmful to the land. This is one of the many areas in which education and training will play a crucial role.

9. See Roger Murray's *Namibia Through the 1990s - Turning Rich Resources Into Growth* - a special report of the Economist Intelligence Unit.

10. "Too soon to cry wolf?," *Financial Mail*, 24 April, 1992. Because this Act fails to protect Namibian business people, there are complaints that foreigners with capital and large operations are actually advantaged by current law.

11. Rukoro, 1988:4 Ellis (1984:8) says the white child had six to ten times as much spent on him as the black child. Also see Leistner and Esterhuysen, 1990:179.

    In 1982 only 261 Africans completed secondary school, compared to 131 "coloureds" and 832 whites. During the early 1980's educational opportunities for Africans did in fact increase, but this was negated by high drop out rates. By 1988, there were 70,000 school- age children not attending school.

12. Ngondi Alfonso Kamatuka, "Namibian Education - Where Do We Go from Here?" Paper presented at the launching of the Namibian Students Association, Dana College, Blair, Nebraska, 22 May, 1991.

13. Ellis, 1984:8. In 1978, while 2,268 white Namibians were studying at universities in South Africa, only 157 "coloureds" and 98 Africans were in similar studies. In 1982, only 23 Africans and 7 "coloureds", as compared to 359 whites, earned the qualifications for university entrance.

14. Rukoro, 1988:13. In 1988, the Academy's teaching staff consisted of 186 positions, of whom only 25 were Africans holding mainly junior-level positions. By 1990, only 476 students were enrolled for university degrees. The vast majority of the Academy's students were registered in non-degree programs.

15. "88% of Nam teachers not qualified," *The Namibian*, 18 May 1990. Qualified is defined as having had four years of tertiary education. In 1989, only 25 percent of teachers had themselves successfully completed high school, and 20 percent had not completed the equivalent of eighth grade.

16. "Higher Education in Namibia" op cit. p. 144 The Commission goes on to say: "This implies that about one-fifth of all junior secondary teachers will be expected to teach pre-vocational subjects, which amounts to over 500 for the present enrolment."

17. The faculties of Law and of Agriculture and Natural Resources will be added in about two years. The Natural Resources faculty will consist of departments in Marine Resource Development, Mineral Resource Development and Water Resource Development. The Health Sciences faculty will consist of departments in Nutritional Studies, Food Hygiene and Health Education. (*Building the University of Namibia*)

18. *Building the University of Namibia*. The Center for Media Studies, the Language Center and the Multi-disciplinary Research Center will be added subsequently.

19. "The new University of Namibia has duly constituted bodies such as a Council and Senate. The Council is representative of as wide a spectrum of Namibia's community as is compatible with intellectual and democratic rigour. The Senate is the institution's highest academic body. The Senior Management of the university, consisting of the Vice-Chancellor, Pro-Vice Chancellors and Deans of Faculties are the prime custodians of the academic reputation of he University. The Council of the University is empowered to establish sub-committees, such as those on appointments and finance, which can act on its behalf." (*Building the University of Namibia*)

20. A creche with a capacity of 200 children will be available for students with children.

21. This policy should insure that the university is not deprived of its academic leadership and the impression conveyed that the university is of lower standard than foreign institutions.

22. For example, duty of up to 100% of the value of the goods is routinely levied by Custom officials on imported items. Port, storage and transportation charges can also escalate the real costs of receiving donations from abroad.

23. The issue is especially urgent because in southern Africa the American term "multiculturalism" can sound as though it is another version of apartheid's idea of "multi national" states or "group rights", leading to these important matters being mistakenly dismissed out of hand.

24. Curricular change can reflect—and inspire—new thinking. ". . . we have a number of ways to know and think about the world, including doing, seeing and manipulating symbols. What is more, each of us has to construct our own version of reality by main force, literally to make ourselves. And we are quite capable of devising new ways of thinking that can enormously expand the understandings we attain." (Jerome Bruner, quoted in Kay, 1991:140)

25. "These include an Agreement with the Federal University of Technology (Nigeria) to train Namibian engineers. It is planned to establish similar agreements with Zimbabwe (Engineering); Zambia (Veterinary Sciences); Botswana (Librarianship); Bochum University (Medicine and Social Sciences) and the University of Bremen in Germany; Ohio University in the United States of America and Surrey University in the United Kingdom (Teacher Education); and the College de France (Technical, Academic and Research Programmes). (*Building the University of Namibia*, p.7)

26. Interview with Dr. Peter Katjavivi, *SASPOST*, November 5, 1992.

27. See Reginald Green's excellent "thinkpiece" entitled *University Research in Namibia*

28. Turner, 1990:122. It is likely that the bulk of Namibians studying in South Africa are white, while the majority of those studying elsewhere are African.

29. "Computers have become the tool of the scholarly community of the 1990's just as printing extended the power of the word five hundred years ago. Computers are used to analyze information and record experiments; to keep track of students and to manage funds; to teach and to record thought; and to communicate with colleagues world-wide, and to send each other information at the speed of light." *The Report of the Committee on Computing and Information Planning: A Transformation of Computer and Information Technology at Rutgers, The State University of New Jersey*, March, 1992, p.2

30. Case Western Reserve is installing a network of optical fiber which will connect computers in all dormitory rooms, faculty and staff offices, classrooms, libraries, and laboratories. It will also be linked to local, national and international networks.

    "Academics and students who are already on the network can send electronic mail and text just about anywhere. They can search the university's library catalogs on line and borrow commercial software from a network program bank. They can use Cleveland's Metropolitan- area computer system, from which they can get news from USA Today and read Supreme Court decisions as soon as they are handed down. And it is all free." A professional who designs such a system confidently asserted, "universities will not be competitive in the years ahead without this kind of environment".

    ("University Hopes Campuswide network Will Help Give it the Competitive Edge", *The Chronicle of Higher Education*, April 29, 1992)

31. Because "electronics are demonstrating that they are more cost effective every day and every hour," some observers are predicting that electronics will eventually replace print as the medium for conveying information. (*The Chronicle of Higher Education*, July 1, 1992, p.A15)

32. Internet, a global network of networks, provides instant access to such information as first person accounts of the events at Tianenmen Square and last year's coup in the former Soviet Union.(*The Chronicle of Higher Education*, April 22, 1992.)

    One of the goals of the New Jersey Intercampus Network (NJIN) is to connect all of New Jersey's college and universities with the capacity for two way, interactive video. Ultimately this will be expanded to include precollege students and teachers. Many systems are linking with sites elsewhere in the country and with sites in different countries.("Colleges use video conferences to trim their travel budgets", *The Chronicle of Higher Education*, December 11, 1991.)

33. "Move over public television - here comes the National Public Telecomputing Network," *Technology and Learning*, November/December, 1991.The continuing improvements in "hardware," such as the use of light waves and parallel processors, will further expand the potential of advanced information technologies. Gallium-arsenide chips will soon allow speeds five to six times faster than silicon chips, while optical disks offer huge increases in storage capacity.

34. IIE wishes to thank those Namibians who took time to answer our questionnaire. In addition, the Institute appreciates the generous cooperation of the African American Institute, the Phelps-Stokes Fund and the Evangelical Lutheran Church of America in compiling information on Namibian students in the United States. The survey data are based on 44 responses to questionnaires sent to Namibians now in Namibia. Fifty-two percent of the respondents are male.

35. Most students received one degree in the United States. However, 37 percent received two degrees, 9 percent received three degrees and 2 percent received four degrees. The degrees received were:

9 percent	AA or other degree
74 percent	Bachelors degree
7 percent	Diploma
45 percent	Masters degree
5 percent	Doctorate degree

36. *AAI - Resume of Refugee Activities*, p.3

BIBLIOGRAPHY

GOVERNMENT OF NAMIBIA

Ministry of Education, Culture, Youth, and Sport. Ministry of Agriculture, Fisheries, Water and Rural Development. (1990). *Agricultural Education and Training in Independent Namibia.* Windhoek.

Ministry of Education, Culture, Youth and Sport. (1990). *Change With Continuity.* Policy Statement. Windhoek.

___. (1991). *Teacher Education Reform for Namibia.* Report. Windhoek.

Ministry of Education and Culture.(1992) *Annual Report of the Ministry of Education and Culture for the year ending 31 December 1991.* Windhoek: Multi Services.

___. (1992). *Toward Education for All: A Development Brief for Education, Culture, and Training.* Draft paper for discussion. Windhoek.

___. (1992). *The Curriculum for Formal Senior Secondary Education: Draft B (IGCSE + HIGCSE Option).* Draft paper. Windhoek.

___. (1992). *Curriculum Guide for Formal Basic Education: Version 7.* Windhoek.

___. Department of Adult and Nonformal Education. (1992). *A Namibian Distance Education College: Taking Education to the People.* Report of the Consultancy Team on Distance Education. Windhoek.

___. (1992) Draft Master Plan for the Polytechnic of Namibia. Working Document, 3rd revised draft, October 1992.

Ministry of Finance. (1991). *Economic Review: Budget.* Windhoek.

Ministry of Manpower Development. Department of Economic Affairs. (1988). "Manpower Survey." Summary of the results of the 1988 Manpower Survey. Windhoek.

ADDITIONAL SOURCES

Cooper, Allan D. *U.S. Economic Power and Political Influence in Namibia, 1700 -1982.* Boulder: Westview Press, 1982.

Council of Churches in Namibia. (1987). "Namibia in Perspective."Windhoek.

The Economist Intelligence Unit. (1989). "Namibia, Botswana, Lesotho, Swaziland: Country Report." London.

Ellis, Justin. *Education, Repression and Liberation : Namibia.* London: Catholic Institute for International Relations, 1984.

Green, Reginald Herbold. 1991. "A Study of Magnitudes and Directions". Paper prepared for Namibian Commission on Higher Education. Windhoek.

___. 1991. "University Research in Namibia: A Thinkpiece." Unpublished Manuscript.

Halal, W. E., "The information technology revolution," *The Futurist,* July - August 1992.

Hultin-Craelius, Mats with Goran Tannerfeldt. "Vocational Education and Training in Namibia: A Development proposal." 1990. Unpublished Manuscript.

International Labour Office. 1991. Employment Advisory and Training Policy Mission. Namibia. 2 Vols. Geneva.

International Labour Office. (1991). *Namibia: Report of the ILO Employment Advisory and Training Policy Mission.* Vol.2, *Training.* Geneva.

Johnson, Walton. (1982) "Education: Keystone of Apartheid." *Anthropology and Education Quarterly,* vol. 13 no.3.

Kamatuka, Ngondi Alfonso. (1991) "Namibian Education - Where Do We Go From Here?" Paper presented at the launching of the Namibian Students Association, 22 May, 1991, Dana College, Blair, Nebraska.

___. (1987) "A Namibian Perspective of the Future of Education in Namibia." Ph.D. diss. University of Michigan-Ann Arbor microfilms.

Leistner, E. and Esterhuysen, P. (1990) *Namibia 1990.* Pretoria: Africa Institute.

Minnich, Elizabeth.(1990) *Transforming Knowledge.* Philadelphia: Temple University Press.

Okala, Peter. (1992) *Preparation of a Framework for the Establishment of a National Polytechnic in the Republic of Namibia.* Ministry of Education and Culture and UNICEF report, 2nd July - 15th July 1992.

"Namibia: Country Profile." (1990) London: Economist Intelligence Unit.

Namibia Education and Training Trust Fund. (1990). "The National Integrated Education system for Emergent Namibia." Draft proposal for education reform and renewal. Windhoek.

Namibian Department of National Education. (1990). *Non-formal Educational Opportunities in Namibia.* Windhoek: Government Printing Office.

"SADCC: Human Resources Primary Factor in Development." (1991) Paper presented at SADCC conference, Windhoek, January 1991.

Sutton, Frank X. (1990). "The World in the 1990's." Unpublished manuscript.

Turner, John. (1990). *Education in Namibia.* Report of a consultancy for the Ministry for Education, Culture and Sport. Windhoek.

___. (Chair) (1991). *Higher Education In Namibia: Report of a Presidential Commission.* Windhoek.

___. (1992). "University Entrance Options In Namibia." Unpublished manuscript.

UNDP/UNESCO. (1989) *Education in Namibia.* Executive Summary. July 21 - September 7, 1989.

United Nations Institute for Namibia. (1984). *Education Policy for Independent Namibia.* Based on the work of Moses P. Tijitendero. Lusaka, Zambia.

United Nations Secretariat. Department of Public Information. (1990) *Namibia Outlook.* New York.

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